

IN THE SPECIFICATION:

The specification as amended below with replacement paragraphs shows added text with underlining and deleted text with ~~striketthrough~~.

Please REPLACE the paragraph beginning at 2, line 1, with the following paragraph:

[0004] Among technologies for detecting the location of a mobile robot related to allowing a mobile robot to return to a docking station, there are Korean Patent Laid-open Publication Nos. 2000-66728 and 2002-33303, US Patent Nos. 6,338,013 and 6,138,063, and Japanese Patent Laid-open Publication No. 2000-560063. Korean Patent Laid-open Publication No. 2000-66728 relates to a robot capable of detecting a sound direction and a motion direction and with an intelligent function of automatic charge, and discloses an algorithm for the robot to return to an automatic charger by measuring the direction of sound. For this, if sound with a predetermined frequency is generated and output from a charger or the like, the robot detects the direction of the sound so that the robot can dock with the charger. This technology can measure and control only the direction of the robot. Korean Patent Laid-open Publication No. 2002-33303 relates to an apparatus for recognizing the location of a robot in a robot soccer game machine, and only the location of a robot is recognized by using a plurality of beacons. US Patent No. 6,338,013 discloses a multifunctional, mobile appliance using a high precision positioning system capable of determining the location of a robot when the robot travels or stops. US Patent No. 6,138,063 discloses an apparatus which uses a gyrosensor to detect a direction angle so that a cleaning robot can autonomously modify the direction of travel and accurately arrive at a target location of travel. Japanese Patent Laid-open Publication No. 2000-560063 discloses a robot capable of accurately recognizing its location through a transmission and reception apparatus capable of communicating a predetermined signal with a fixed station.